

selected from ~~the group consisting of a hedgehog therapeutic; or a ptc therapeutic and an fgf-10 therapeutic.~~

3.     **(Original)** The method of claim 1, wherein the lung tissue is in culture, and the agent is provided as a cell culture additive.
4.     **(Original)** The method of claim 1, wherein the cell is treated in an animal and the agent is administered to the animal as a therapeutic composition.
5.     **(Original)** The method of claim 1, wherein the agent is a hedgehog therapeutic.
6.     **(Original)** The method of claim 5, wherein the hedgehog therapeutic is a polypeptide including a hedgehog polypeptide sequence of at least a bioactive extracellular portion of a hedgehog protein.
7.     **(Original)** The method of claim 6, wherein the polypeptide includes at least 50 amino acids residues of an N-terminal half of the hedgehog protein.
8.     **(Original)** The method of claim 6, wherein the polypeptide includes at least 100 amino acids of an extracellular domain of the hedgehog protein.
9.     **(Original)** The method of claim 6, wherein the polypeptide includes at least a portion of the hedgehog protein corresponding to a 19kd fragment of an extracellular domain of the hedgehog protein.
10.    **(Original)** The method of claim 6, wherein the hedgehog protein is encoded by a gene of a vertebrate organism.
11.    **(Original)** The method of claim 6, wherein the polypeptide includes a hedgehog polypeptide sequence represented in the general formula of SEQ ID No. 21.
12.    **(Original)** The method of claim 6, wherein the polypeptide includes a hedgehog polypeptide sequence represented in the general formula of SEQ ID No. 22.
13.    **(Original)** The method of claim 6, wherein the hedgehog protein is encoded by a human hedgehog gene.

14. **(Currently amended)** The method of claim 6, wherein the hedgehog polypeptide sequence is at least 60 percent identical to an amino acid sequence of a hedgehog protein selected from ~~the group consisting of~~ SEQ ID No:9, SEQ ID No:10, SEQ ID No:11, SEQ ID No:12, SEQ ID No:13, SEQ ID No:14, SEQ ID No:15, or ~~and~~ SEQ ID No:16.
15. **(Currently amended)** The method of claim 6, wherein the hedgehog polypeptide sequence is encodable by a nucleotide sequence which hybridizes under stringent conditions to a sequence selected from ~~the group consisting of~~ SEQ ID No:1, SEQ ID No:2, SEQ ID No:3, SEQ ID No:4, SEQ ID No:5, SEQ ID No:6, SEQ ID No:7, or ~~and~~ SEQ ID No:8.
16. **(Currently amended)** The method of claim 6, wherein the hedgehog polypeptide sequence is an amino acid sequence of a hedgehog protein selected from ~~the group consisting of~~ SEQ ID No:9, SEQ ID No:10, SEQ ID No:11, SEQ ID No:12, SEQ ID No:13, SEQ ID No:14, SEQ ID No:15, or ~~and~~ SEQ ID No:16.
17. **(Original)** The method of claim 6, wherein the hedgehog polypeptide sequence is an amino acid sequence of a Sonic hedgehog protein.
18. **(Original)** The method of claim 1, wherein the agent is a ptc therapeutic.
19. **(Original)** The method of claim 18, wherein the ptc therapeutic is a small organic molecule which binds to a patched protein and derepresses patched-mediated inhibition of mitosis.
20. **(Currently amended)** The method of ~~claims~~ claim 18, wherein the ptc therapeutic binds to patched and mimics hedgehog-mediated patched signal transduction.
21. **(Original)** The method of claim 20, wherein the ptc therapeutic is a small organic molecule.